CLAIMES

1. An optical component composed of cured-resin-product, the cured resin product comprising a perfluorocyclohexane ring and being prepared by radical polymerization.

2. The optical component composed of cured-resin-product according to Claim 1, wherein one or more perfluorocyclohexane rings derived from monosubstituted, disubstituted, and trisubstituted monomer are included as the perfluorocyclohexane ring.

3. The optical component composed of cured-resin-product according to Claim 1 or 2, wherein the cured resin product is prepared from one or more monomers containing a perfluorocyclohexane ring and one or more radical polymerization groups.

4. The optical component composed of cured-resin-product according to Claim 3, wherein the cured-resin-product is prepared from one or more monomers containing a perfluorocyclohexane ring and two or more radical polymerization groups and one or more fluorine-containing monomers containing no perfluorocyclohexane ring; or prepared from one or more monomers containing a perfluorocyclohexane ring and a radical polymerization group and one or more fluorine-containing monomers

containing no perfluorocyclohexane ring and containing two or more radical polymerization group.

5. The optical component composed of cured-resin-product according to Claim 1 or 2, wherein the cured-resin-product is prepared from a composition of one or more polymers or copolymers containing a perfluorocyclohexane ring, or the mixture thereof, dissolved in one or more monomers selected from fluorine-containing monomers containing two or more radical polymerization groups.

6. The optical component composed of cured-resin-product according to Claim 5, wherein one or more of the fluorine-containing monomers containing two or more radical polymerization groups contain a perfluorocyclohexane ring.

7. The optical component composed of cured-resin-product according to Claim 5 or 6, wherein the copolymer is a copolymer of one or more of monomers containing a perfluorocyclohexane ring and one radical polymerization group and one or more of fluorine-containing monomers containing no perfluorocyclohexane ring but containing one radical polymerization group.

8. The optical component composed of cured-resin-product according to any one of Claims 5 to 7, wherein the copolymer is a copolymer of one or more of monomers containing a perfluorocyclohexane ring and one radical polymerization group and one or more of fluorine-containing

monomers containing no perfluorocyclohexane ring but containing one radical polymerization group; and the one or more of the monomers in the fluorine-containing monomers containing two or more radical polymerization groups are one or more of monomers containing a perfluorocyclohexane ring and two or more radical polymerization groups and/or fluorine-containing monomers containing no perfluorocyclohexane ring and containing two or more radical polymerization group.

9. The optical component composed of cured-resin-product according to Claim 1 or 2, wherein the cured-resin-product is prepared from a composition containing one or more fluorine-containing polymers containing no perfluorocyclohexane ring, copolymer thereof, or the mixture thereof, dissolved in one or more monomers containing a perfluorocyclohexane ring and two or more radical polymerization groups.

10. The optical component composed of cured-resin-product according to Claim 9, wherein one or more of the monomers containing a perfluorocyclohexane ring and two or more radical polymerization groups is used in combination with one or more of fluorine-containing monomers containing no perfluorocyclohexane ring.

11. The optical component composed of cured-resin-product according to any one of Claims 3 to 10, wherein the

radical polymerization group is an acryloyloxy or methacryloyloxy group.

12. The optical component composed of cured-resin-product according to any one of Claims 3 to 10, wherein the monomer containing a perfluorocyclohexane ring and one or more radical polymerization groups contains an alkylene group represented by general formula: $-(CH_2)_n-$ (n=0, 1 or 2), between the perfluorocyclohexane ring and the radical polymerization group.

13. The optical component composed of cured-resin-product according to any one of Claims 1 to 12, wherein the radical polymerization method is a photo-curing method and/or a heat curing method.

14. The optical component composed of cured-resin-product according to any one of Claims 1 to 13, wherein Young's modulus of the cured-resin-product is 2,500 MPa or more.

15. The optical component composed of cured-resin-product according to any one of Claims 1 to 14, wherein the optical component composed of a cured-resin-product is an optical waveguide-like part.

16. The optical waveguide-like part according to Claim 15 , wherein the optical waveguide-like part is prepared by a stamper method.